

REMARKS

Initially, the Examiner has objected to the drawings under 37 CFR §1.83(a) as failing to show every feature of the invention specified in the claims and has objected to the specification for the same reason. It appears that the Examiner believes that certain phrases used in the claims, namely, “interior,” “control module,” “power unit,” “interface,” “intermediate unit,” “power supply unit,” and “control structure” are not shown in the drawings. However, based upon a review of the claims and the specification, it appears that Examiner is merely objecting to the fact that certain claim elements are not identified exactly as provided for in the specification. For example, the specification utilizes the phrase “interface module,” while claims 9-16 refer to the component as an interface unit. As hereinafter described, however, there is no requirement that the language used in a claim must mirror the language used in the specification.

Referring MPEP, § 2173.01, [a] fundamental principal contained in 35 U.S.C. 112, second paragraph, is that applicants are their own lexicographers. They can define in the claims what they regard as their invention essentially in whatever terms they choose so long as any *special* meaning assigned to a term is clearly set forth in the specification. “[A] claim may not be rejected solely because of the type of the language used to define the subject matter for which patent protection is sought”. *Id.* “An examiner must focus their examination of claims for compliance with the requirement for definiteness under 35 U.S.C. 112, second paragraph, as whether the claim meets the threshold requirements of clarity and precision, not with whether more suitable language or molds of expression are available.” MPEP § 2173.02.

Given that applicant has used no special language in the claims and that the language in the claims is substantially similar to the language in the specification such that a person of ordinary skill in the art could interpret the meets and bounds of the claim, applicant is perplexed

as to the Examiner's objections to the drawings under 37 CFR § 1.83(a) and to the specification as failing to provide proper antecedent basis. Clarification of the Examiner's objections or withdrawal of the same is respectfully requested.

The Examiner has also rejected claim 20 under USC § 112, first paragraph, as failing to comply with the enablement requirement. The Examiner suggests that the specification does not disclose how the interface module is disposed between the interconnecting power module and interface module. Referring to Figs. 1-3, it is evident that the intermediate module 14 is disposed between interface module 12 and the drive/power module 16. As noted in the specification, drive module 16 includes housing 46 for receiving inverter 24. Similarly, claim 20 requires the drive of power module to house an AC drive, e.g., an inverter. Further, as noted in the specification, interface module 12, intermediate module 14 and drive or power module 16 are physically interconnected in any suitable matter such as by screws or the like. See, specification, page 5, line 5-page 6, line 1. Hence, it is believed that the subject matter of claim 20 is fully described in the specification and withdrawal of the Examiner's rejections to claim 20 under 35 U.S.C. § 112, first paragraph, is respectfully requested.

The Examiner has rejected claims 1-23 under 35 U.S.C. § 103(a) as being unpatentable over Schienbein et al., U.S. Application No. US 2003/0036806 in view of Gupta et al., U.S. Patent No. 6,605,928. As hereinafter described, applicant has amended the pending claims to more clearly define the invention for which protection is sought. Applicant believes that the claims now pending clearly define over the cited references and reconsideration of the Examiner's rejection under 35 U.S.C. § 103(a) is respectfully requested in view of the following comments.

Claim 1 defines a modular control system for an AC motor. The control system includes a drive module housing an AC drive. The AC drive interconnects the AC motor to a utility power source. A control module houses a control structure for controlling operation of the AC drive. A redundant power supply is operatively connected to the control structure for supplying electrical power to the control structure. An intermediate module interconnects the control module and the drive module so as to electrically couple the control structure in the AC drive and to allow the control structure to transmit operating instructions to the AC drive therethrough. As hereinafter described neither of the cited references shows or suggests an intermediate module that interconnects the control module and the drive module so as to electrically couple the control structure and the AC drive and to allow the control structure of the AC drive to communicate.

The '806 application is directed to a power conservation energy management system that includes a controller, one or more standard modules and a custom backplane. The backplane accommodates one or more modules and uses the modules to control power quality and/or the flow of power to one or more input/output selections. As best seen in Fig. 5, the back plane includes both analog and digital circuitry. The digital backplane communicates digital signals with the digital components of the inverter, converter and grid modules. The analog backplane communicates analog signals with the analog components of the inverter, and grid modules. The grid module monitors the voltages supplied by the inverter to the backplane and decides when the system should be connected to the power grid. Hence, no operating instructions pass between from the control structure and the AC drive through the grid connect module. Further, there is no teaching or suggestion in the '806 application to provide the intermediate module that electrically interconnects a control structure and an AC drive so as to allow the control structures to transmit operating structures to the AC drive therethrough.

The Gupta et al. '928 patent cannot cure the deficiencies of the '806 application. More specifically, the '928 patent merely discloses an electrical system for a turbine/alternator comprising a gas driven turbine and permanent magnet alternator rotating on a common axis. Hence, there is no teaching or suggestion in either of the cited references to provide a modular control system in accordance with the present invention. As such, it is believed that independent claim 1 defines over the cited references and is in proper for allowance.

Claims 2-8 depend either directly or indirectly from independent claim 1 and further define a modular control system not shown or suggested in the art. It is believed that claims 2-8 are allowable as depending from an allowable base claim and in view of the subject matter of each claim. It is noted that applicant is somewhat perplexed as to the Examiner's rejection of claim 7. Claim 7 requires the power module to include a secondary power source for applying electrical power to the control structure independent of the utility power source. The Examiner has suggested that item 14 in the '806 application equates with such a power source. However, item 14 in the '806 patent is merely a fused DC plug connector that has the ability to serve as a fuel cell. Hence, there is no suggestion for providing a secondary power source for supplying electrical power to the control structure that is independent of the utility power source as required by claim 7. In view of the foregoing, it is believed that claims 2-8 are in proper form for allowance.

Referring to claim 9, a drive system for an AC motor is defined. The drive system includes a power unit housing for an AC drive. The AC drive is connectable to the AC motor and to a power source. An interface unit houses a programmable control circuit that controls operation of the AC drive. A redundant power supply is operatively connected to the control circuit for supplying electrical power to the control circuit. An intermediate unit is disposed between and interconnects the power unit and the interface unit so as to allow the control unit to communicate with the AC drive therethrough. As heretofore described with respect to independent claim 1, nothing in the '806 application or the '928 patent shows or suggests an

intermediate unit or module that interconnects a power unit to an interface unit so as to allow a control circuit to communicate with the AC drive. There is no teaching or suggestion in either of the cited references for such a structure. As such, it is believed that independent claim 9 defines over the cited references and is in proper form for allowance.

Claims 10-16 depend either directly or indirectly from independent claim 9 and further define a drive system not shown or suggested in the art. It is believed that claims 10-16 are allowable as depending from an allowable base claim and in view of the subject matter of each claim. Referring to claim 15, it is noted, once again, that nothing in either of the cited references shows or suggests a power supply operatively connected to a control circuit for providing electrical power to a control circuit wherein the power supply is independent of the power source. Such a structure is entirely absent from the cited reference.

Claim 17 defines a drive system for an AC motor. The drive system includes a power module housing AC drive. The AC drive is connectable to an AC motor and to a power source. An interstate module houses a programmable control circuit that controls operation of the AC drive. A power supply unit has a power supply selectively connectable to the control circuit for providing electrical power to the control circuit independent of the power source.

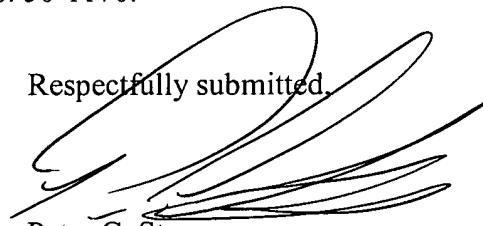
As noted with respect to claims 7 and 15 described above, neither of the cited references shows or suggests an AC drive unit that incorporates a separate power supply that is selectively connectable to the control circuit for providing electrical power to the control circuit independent to the power source. More specifically, the power conversion and energy management system defined in the '806 patent contemplates connection to a single power source. The presence of a second power supply is not shown or suggested in the cited references. In view of the foregoing, it is believed that independent claim 17 defines over the cited references and is in proper form for allowance.

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Claims 18-23 depend either directly or indirectly from independent claim 17 and further define a drive system not shown or suggested in the art. It is believed that claims 18-23 are allowable as depending from an allowable base claim and in view of the subject matter of each claim.

Applicant believes that the present application with claims 1-23 is in proper form for allowance and such action is earnestly solicited. The Director is hereby authorized to charge payment of any extension or additional fees associated with this or any other communication or credit any overpayment to Deposit Account No. 50-1170.

Respectfully submitted,



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